

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,)	
)	
Plaintiff,)	Civil Action No. 99-CV-02496 (GK)
)	
v.)	
)	
PHILIP MORRIS USA INC.,)	Next scheduled appearance:
f/k/a PHILIP MORRIS INC, <i>et al.</i> ,)	Trial (ongoing)
)	
Defendants.)	
)	

WRITTEN DIRECT EXAMINATION OF
ROMAN L. WEIL, Ph.D.
SUBMITTED PURSUANT TO ORDER # 471

TABLE OF CONTENTS

I.	INTRODUCTION	1
A.	GENERAL BACKGROUND	1
B.	OUTLINE OF OPINIONS TO BE EXPRESSED IN THIS CASE	3
II.	WHAT ARE THE LIKELY EFFECTS OF THE VARIOUS PROPOSED REMEDIES ON DEFENDANTS' ECONOMIC INCENTIVES TO ENGAGE IN FUTURE RICO VIOLATIONS?	7
A.	INJUNCTIVE RELIEF DIRECTLY AFFECTS DEFENDANTS' ECONOMIC INCENTIVES TO ENGAGE IN FUTURE RICO VIOLATIONS, IT IS TARGETED, AND IT IS FLEXIBLE.....	7
B.	DRS. FIORE AND HEALTON: REQUIRING DEFENDANTS TO PAY MONEY UNCONDITIONALLY HAS NO DIRECT EFFECT ON THEIR ECONOMIC INCENTIVES TO COMMIT FUTURE RICO VIOLATIONS AND IS NOT TARGETED TO THE FUTURE RICO VIOLATIONS.	10
C.	DR. GRUBER: AN ASSESSMENT FOR EACH YOUTH SMOKER IN EXCESS OF A TARGET INCONSISTENTLY AFFECTS DEFENDANTS' ECONOMIC INCENTIVES TO COMMIT FUTURE RICO VIOLATIONS, DEPENDING UPON THE CIRCUMSTANCES, AND IS NOT TARGETED TO FUTURE RICO VIOLATIONS.	13
III.	WHAT IS THE LIKELY EFFECT OF THE PROPOSED REMEDIES ON DEFENDANTS AND INNOCENT THIRD PARTIES?.....	20
A.	INJUNCTIVE RELIEF IMPOSES NO HARM ON INNOCENT THIRD PARTIES UNRELATED TO THE COMMISSION OF A FUTURE RICO VIOLATION.....	20
B.	REQUIRING DEFENDANTS UNCONDITIONALLY TO PAY APPROXIMATELY \$5.5 BILLION ANNUALLY FOR ABOUT 25 YEARS LIKELY WOULD HAVE ADVERSE CONSEQUENCES ON INNOCENT THIRD PARTIES UNRELATED TO THE COMMISSION OF A FUTURE RICO VIOLATION.....	21
C.	DR. GRUBER'S PROPOSED ASSESSMENT FOR EXCESS YOUTH SMOKERS LIKELY WOULD HARM INNOCENT THIRD PARTIES UNRELATED TO THE COMMISSION OF FUTURE RICO VIOLATIONS BY DEFENDANTS.	27
IV.	ERRORS IN THE GRUBER \$3,000 PER YOUTH SMOKER ASSESSMENT.....	28

1 I. INTRODUCTION.

2 A. GENERAL BACKGROUND.

3 Q. Would you please tell us your full name and where you live?

4 A. My name is Roman L. Weil, and I live in [DELETED]

5 Q. Where are you employed?

6 A. I am the V. Duane Roth Professor of Accounting at the Graduate School of Business of

7 the University of Chicago. I am also the Director of the Chicago/Stanford Law School/Wharton

8 Directors' Consortium. During this academic year, I am a Visiting Professor of Accounting at

9 the University of Washington, in Seattle.

10 Q. Please describe for the Court your educational history.

11 A. As set forth in more detail in my curriculum vitae (JD-068098), I received my BA in

12 economics and mathematics from Yale University in 1962. In 1965, I received an M.S. in

13 industrial administration from Carnegie Mellon University. In 1966, I received a Ph.D. in

14 economics from Carnegie Mellon.

15 Q. Please describe for the Court your professional experience.

16 A. I have been a member of the faculty of the University of Chicago since 1965. I have

17 taught graduate courses in economics, mathematical economics, applied economics, accounting,

18 corporate finance, mathematics, and computer science.

19 I am the Director of the Chicago/Stanford Law School/Wharton Directors' Consortium,

20 in which role I help teach corporate board members how to understand accounting and valuation

21 issues.

22 At various times since 1965, I have accepted visiting appointments to the faculties of

23 other universities, including Visiting Professor of Accounting and Visiting Professor of

24 Economics at Stanford University, Visiting Professor of Accounting and Law at the New York

1 University School of Law, and Visiting Professor at the University of Washington Business
2 School. During the academic years 1990/91 through 1995/96, I was Visiting Professor at the
3 Stanford University School of Law, teaching courses in economics and accounting. I have also
4 taught during every year of its existence at the Directors' College of the Stanford Law School.

5 Q. In addition to your academic activities, have you had any other professional
6 experience?

7 A. Yes.

8 Q. Please describe that professional experience for the Court.

9 A. I am a Certified Public Accountant and a Certified Management Accountant. I have been
10 a member of the Financial Accounting Standards Advisory Council and I served on the Financial
11 Accounting Standards Board Task Force on Financial Instruments.

12 I have consulted to the Securities and Exchange Commission in matters involving
13 accounting and management fraud.

14 Q. Have you published in the fields of accounting and economics?

15 A. Yes, I have authored or co-authored several books, articles, notes and reviews concerning
16 accounting and economics; a complete list of those publications is included on my curriculum
17 vitae (JD-068098).

18 Q. Have any of your publications appeared in peer-reviewed journals?

19 A. Yes.

20 Q. What are some examples of peer-reviewed journals in which your articles have
21 appeared?

22 A. A few examples would be: Journal of Accountancy, Journal of Law and Economics,
23 Financial Analysts Journal, Econometrica, and Journal of Political Economy.

1 Q. Have you ever held editorial positions for journals in the fields of accounting and
2 economics?

3 A. Yes. I have served as Associate Editor of The Accounting Review (1975-79); Associate
4 Editor of Management Science (1970-76); Editorial Board of Journal of Accounting and
5 Economics (1979-81); and Editorial Board of Financial Analysts Journal (1980-88).

6 Q. Have you belonged to any professional associations or societies?

7 A. Yes; some include: the American Accounting Association; American Economic
8 Association; American Institute of Certified Public Accountants; and The Institute of
9 Management Sciences.

10 Q. Have you ever been accepted by a court as an expert in the fields of accounting and
11 economics?

12 A. Yes. I have testified as an expert in both federal and state courts on matters involving
13 accounting, economics, and damages in a variety of different contexts, including cases
14 concerning alleged anti-trust violations, patent infringement, breach of contract, accountants'
15 malpractice, income tax liability, and securities law violations.

16 B. OUTLINE OF OPINIONS TO BE EXPRESSED IN THIS CASE.

17 Q. Professor Weil, before we begin discussing the substance of your opinions in this
18 case, I want to set forth the topics that the Defendants asked you to address.

19 What remedies were you asked to consider?

20 A. Counsel asked me to consider certain remedies that I understand the Government
21 explicitly or implicitly is requesting. Namely: (1) injunctive relief; (2) Dr. Fiore's proposed
22 national smoking cessation program; (3) Dr. Heaton's implicit request for continued funding for
23 anti-smoking advertising; and (4) Dr. Gruber's proposed company-specific assessment for each
24 excess "youth" (defined by Dr. Gruber as age 20 and under) smoker over a targeted level.

1 Q. What is your understanding of the remedies proposed implicitly or explicitly by Drs.
2 Fiore, Healton, and Gruber?

3 A. Based on my review of their expert reports, deposition testimony, and written direct
4 testimony, my understanding is that Dr. Fiore proposes that Defendants fund a national cessation
5 program for 25 years or more at an annual cost of about \$5.2 billion; Dr. Healton appears to
6 suggest implicitly that the Defendants fund a national anti-smoking media campaign at an annual
7 cost of approximately \$350 million; and, starting in 2007, Dr. Gruber proposes to assess
8 individually each Defendant cigarette manufacturer a \$3,000 penalty for each "youth" smoker of
9 that manufacturer's cigarette brands in excess of a proposed target.

10 Q. As to those remedies, what questions were you principally asked to address?

11 A. As to those remedies, including injunctive relief, counsel asked me to address two
12 principal questions: (1) what is the likely effect of the proposed remedy on Defendants'
13 economic incentives to commit future RICO violations; and (2) what is the likely economic
14 effect of the proposed remedy on innocent third parties.

15 Q. Were you asked to address other issues?

16 A. Yes. In addition, counsel asked me to evaluate from an accounting and economic
17 perspective the reasonableness of Dr. Gruber's proposed \$3,000 assessment per excess youth
18 smoker.

19 Q. Were you asked to make any assumptions?

20 A. Yes.

21 First, counsel told me to assume for my purposes that the Government has established
22 liability for past RICO violations by the Defendants, which the Court has found are likely to
23 recur.

1 Second, counsel told me to assume that those violations involve public statements made
2 by the Defendants that they knew to be false at the time they made the public statements.

3 Third, counsel told me to assume that the Court must impose remedies that would prevent
4 and restrain future violations of the sort giving rise to the finding of liability.

5 Fourth, counsel told me to assume that, in fashioning a remedy, the Court must consider
6 the rights of innocent persons.

7 Q. Please provide the Court with an overview of your opinions concerning the first
8 issue you were asked to address -- the likely effect of the different remedies you examined
9 on Defendants' economic incentives to commit future RICO violations.

10 A. More than any of the other remedies I examined, injunctive relief directly targets the
11 commission of future RICO violations. It reduces or eliminates any economic incentive the
12 Defendants may have to violate the injunction by committing future RICO violations.

13 In contrast, Drs. Fiore and Healton would impose remedies unconditionally, independent
14 of Defendants' future conduct. That is, Defendants cannot avoid them by changing their future
15 behavior. As such, they have no direct effect on Defendants' economic incentives to violate
16 RICO in the future. These remedies may, however, indirectly effect Defendants' economic
17 incentive to violate RICO in the future. Namely, as I, Dr. Gruber, and earlier Dr. Fisher, the
18 Government's principal disgorgement expert, all noted, requiring Defendants unconditionally to
19 pay money now may alter their assessment of the likelihood that, if they commit RICO violations
20 in the future:

21 The Government will sue them again in a lawsuit similar to this
22 one;

23 Defendants might lose; and

24 Defendants may have to pay again.

1 But, that is true of any conceivable monetary remedy for past RICO violations, including
2 disgorgement.

3 Dr. Gruber's proposed remedy does give Defendants economic incentives to achieve the
4 targeted reductions in youth smoking. But, it does not target the commission of future RICO
5 violations. Depending upon the circumstances, Defendants may have to pay Dr. Gruber's
6 assessment even when they commit no future RICO violations at all, and they may avoid
7 payments even when they do commit future RICO violations. Moreover, depending again upon
8 the circumstances, Dr. Gruber's proposed remedy may reduce, or leave unchanged, or even
9 increase Defendants' economic incentives to commit future RICO violations.

10 Q. In broad outline, what opinions did you reach concerning the second question you
11 were asked to address -- the likely economic effect of the proposed remedies on innocent
12 persons?

13 A. More than any of the other remedies I have examined, injunctive relief minimizes the
14 likelihood of adverse effects on innocent third parties unrelated to preventing and restraining
15 future RICO violations.

16 The other remedies I have examined collectively and individually likely would have
17 adverse effects on third parties, even in circumstances where Defendants commit no future RICO
18 violations. Requiring Defendants unconditionally to pay over \$5 billion annually, for instance,
19 raises a significant question about whether these Defendants could survive. Moreover, even if
20 Defendants could survive, the remedies would likely impair Defendants competitively which, in
21 turn, would have repercussions on third parties.

22 Q. Finally, is Dr. Gruber's proposed \$3,000 assessment a reasonable approximation of
23 Defendants' expected profits per excess youth smoker?

1 A. No. Even assuming that Dr. Gruber's objective was to assess an amount slightly greater
2 than the expected lifetime gains to the Defendant cigarette manufacturers from youth smokers in
3 excess of Dr. Gruber's targets, his \$3,000 assessment results from conceptual errors that make it
4 too high.

5 II. WHAT ARE THE LIKELY EFFECTS OF THE VARIOUS PROPOSED
6 REMEDIES ON DEFENDANTS' ECONOMIC INCENTIVES TO ENGAGE IN
7 FUTURE RICO VIOLATIONS?

8 A. INJUNCTIVE RELIEF DIRECTLY AFFECTS DEFENDANTS'
9 ECONOMIC INCENTIVES TO ENGAGE IN FUTURE RICO
10 VIOLATIONS, IT IS TARGETED, AND IT IS FLEXIBLE.

11 Q. First, let's talk about injunctive relief.

12 Would injunctive relief affect Defendants' economic incentives to commit RICO
13 violations in the future?

14 A. Yes, injunctive relief would affect Defendants' economic incentives to commit future
15 RICO violations. That effect would be both direct and targeted.

16 Q. What do you mean when you say that the effect would be both "direct" and
17 "targeted?"

18 A. By "direct," I mean that an injunction would specifically prohibit the commission of the
19 future RICO violations, and it would reduce or eliminate any incentive Defendants may have to
20 commit any prohibited RICO violation in the future because of the threat of punishment for
21 contempt.

22 By "targeted," I mean that the relief affects only Defendants' economic incentives to
23 commit prohibited RICO violations in the future; it has no effect on Defendants' economic
24 incentives to engage in other actions outside the scope of the injunction -- outside because they
25 do not constitute prohibited RICO violations.

1 Q. While agreeing that, in theory, injunctive relief is the only relief necessary, Dr.
2 Gruber testified (Gruber, 5/10/05, Trial Tr. at 20650:5-19 and Written Direct at 9:5-10:4)
3 that he does not know if, in reality, that is true because of the burden and difficulty the
4 Court may have monitoring and restricting the Defendants' conduct.

5 Do you agree?

6 A. That question has two parts.

7 First, from an economics and accounting perspective, I agree with Dr. Gruber that, in
8 theory, injunctive relief, coupled with the threat of punishment for any contempt, is the only
9 relief necessary, provided that the expected penalty exceeds the expected gain from any future
10 violation of the injunction.

11 Second, I do not presume to assess the capability of the Court to detect violations of its
12 injunction and to enforce them. I observe, however, that counsel asked me to assume that the
13 RICO violations consist of fraudulent public statements. Monitoring Defendants' future public
14 statements seemingly would not be too difficult, particularly if the Court retains experts to assist
15 in compliance, for example, to vet the public statements of Defendants and to bring to the
16 Court's attention any questionable statements. I have no expertise with which to evaluate
17 whether ascertaining the truth or falsity of Defendants' future public statements would be easy or
18 hard, but I recognize that it is a responsibility frequently entrusted to our courts. I think the
19 Court would have an easier time assessing, year-by-year or quarter-by-quarter, the truth or falsity
20 of future statements than it will have had in assessing the totality of Defendants' allegedly
21 fraudulent statements over the past fifty years or so.

1 Q. Dr. Gruber testified (Written Direct at 9:13-16) that one of the advantages of his
2 "outcome-based" remedy was its flexibility -- that is, Defendants would be able to choose
3 how best to accomplish the targeted reductions in youth smoking.

4 Is that an advantage that Dr. Gruber's proposed remedy has over injunctive relief?

5 A. Not necessarily. A hypothetical may help illustrate that Defendants can have greater
6 flexibility to achieve desired objectives with injunctive relief compared to Dr. Gruber's
7 "outcome-based" remedy.

8 Assume that the Court finds that Defendants made fraudulent public statements that they
9 do not target youth with their marketing, which statements the Court also finds are likely to
10 continue in the future.

11 Now consider injunctive relief where the Court enjoins Defendants from making false
12 public statements in the future about the targeting of youth with their marketing. Defendants
13 would, in principle, have two broad means of complying. First, Defendants could simply cease
14 making the false statement. Second, Defendants could take actions to make the statement that
15 they do not target youth with their marketing truthful.

16 Now consider Dr. Gruber's proposal where all that matters is whether Defendants
17 achieve the targeted reductions in youth smoking. To the extent that a manufacturer is above Dr.
18 Gruber's youth smoking target and to the extent that directing marketing to youth increases the
19 number of youth smokers of that manufacturer's brand, then, just as with injunctive relief, the
20 cigarette manufacturer could take actions to make the statement that they do not target youth
21 with their marketing truthful. However, since Dr. Gruber's proposed remedy focuses only on
22 achieving the targeted reductions in youth smoking, the Defendants no longer have the option of
23 ceasing to make the false statements in order to comply and to avoid payments.

1 As this example illustrates, Defendants can pursue either of the two principal means of
2 complying with an injunction -- not making the false statement or conforming their conduct to
3 match the statement. Dr. Gruber's proposed remedy removes the option of ceasing to make the
4 false statement in order to comply and to avoid payments. And, Dr. Gruber's proposed remedy
5 encourages the second means of complying with injunctive relief -- Defendants conform their
6 conduct to match the statement -- only insofar as a manufacturer exceeds its youth smoking
7 target and only insofar as ceasing to target youth with their marketing would reduce the number
8 of youth smokers.

9 B. DRS. FIORE AND HEALTON: REQUIRING DEFENDANTS TO PAY
10 MONEY UNCONDITIONALLY HAS NO DIRECT EFFECT ON THEIR
11 ECONOMIC INCENTIVES TO COMMIT FUTURE RICO VIOLATIONS
12 AND IS NOT TARGETED TO THE FUTURE RICO VIOLATIONS.

13 Q. Let's turn now to the remedies proposed by Drs. Fiore and Healton. In your
14 opinion, what is the likely direct effect of the proposals by Drs. Fiore and Healton on
15 Defendants' economic incentives to commit future RICO violations?

16 A. The proposals by Drs. Fiore and Healton would have no direct effect on either
17 Defendants' incremental or marginal economic incentives to commit future RICO violations
18 because the payments are unconditional.

19 Q. What do you mean by "unconditional?"

20 A. An unconditional remedy payment entails assessing Defendants a fixed amount, whether
21 liquidated as a single payment or as a series of payments, which payment(s) they cannot avoid
22 regardless of their future behavior.

23 The proposals by Drs. Fiore and Healton are unconditional payments. In other words,
24 Defendants would have to pay the approximately \$5.5 billion each year whether they violate

1 RICO in the future. No change in Defendants' future conduct would allow the Defendants to
2 avoid these unconditional payments.

3 Q. Why would the unconditional payments proposed by Drs. Fiore and Healton have
4 no direct effect on Defendants' economic incentives to commit future RICO violations?

5 A. From an accounting and economics perspective, a remedy prevents the future
6 commission of particular conduct either (a) by prohibiting it, or (b) by reducing or eliminating
7 Defendants' economic incentives to engage in that conduct.

8 Unconditional remedy payments, such as proposed by Drs. Fiore and Healton, do neither,
9 except to the extent that the payments are so large as to put Defendants out of business so that
10 they engage in no future conduct at all. In particular, Defendants' future conduct can affect
11 neither the proposed payment nor its amount. Because the proposed payments are fixed and
12 unavoidable, they do not make the commission of future RICO violations either more or less
13 attractive economically.

14 In the rubric of economics and accounting, these kinds of payments are known as "sunk
15 costs." (Gruber, 5/10/05, U.S. Trial Tr. at 20615:7-15.) And, it is well-established in the
16 literature that they have no direct effect on future conduct. See Pindyck, R.S. and Rubinfeld,
17 D.L., Microeconomics (3rd ed., Prentice Hall, Inc. 1995) (JD-064799) at 195 ("[S]unk cost . . .
18 should always be ignored when making future economic decisions.").

19 Q. Dr. Gruber testified (5/10/05 U.S. Trial Tr. at 20616:18-25) that requiring the
20 unconditional payment of money, such as proposed by Drs. Fiore and Healton, could
21 indirectly alter Defendants' economic incentive to commit future RICO violations by
22 altering their assessment of the probability that, should future violations occur, the

1 Government would sue again, Defendants would lose, and Defendants would have to pay
2 again.

3 Do you agree?

4 A. Yes, but this is true of any remedy for past RICO violations, including requiring that
5 Defendants unconditionally pay money as compensatory damages, disgorgement, or otherwise.
6 That was also the testimony of Dr. Gruber at trial (5/10/05 U.S. Trial Tr. at 20616:18-25).

7 Virtually any conceivable remedy for past RICO violations has this indirect effect
8 because any alteration in Defendants' assessment of the probability that, should future violations
9 occur, the Government would sue again and Defendants would be found liable again, arises from
10 the finding of liability itself in this case, not from the imposition of the unconditional payment
11 remedies or any other particular remedy.

12 The point remains, moreover, that requiring the unconditional payment of money, which
13 cannot be avoided by changing Defendants' future conduct, can have no direct effect on either
14 Defendants' future economic incentives or their future conduct, including any future RICO
15 violations.

16 Q. Is the unconditional payment of money as proposed by Drs. Fiore and Healtton
17 targeted in the sense you described earlier?

18 A. No. As I explained, requiring the unconditional payment of money does not directly
19 affect either Defendants' future incremental or marginal economic incentives. Although it has
20 no direct effect on Defendants' economic incentives to engage in future conduct that would not
21 violate RICO, it also has no direct effect on Defendants' economic incentives to engage in future
22 conduct that would violate RICO.

1 Q. Does the unconditional payment of money as proposed by Drs. Fiore and Healton
2 give Defendants' flexibility in achieving the objective?

3 A. Insofar as the objective is to require Defendants unconditionally to pay money, the
4 remedies proposed by Drs. Fiore and Healton allows Defendants to decide how best to raise it,
5 including by committing future RICO violations.

6 Insofar as the objective is to avoid future RICO violations by these Defendants, the
7 proposed remedy has no direct effect on Defendants' future conduct. Whether the proposed
8 payment remedies impair Defendants' flexibility in choosing the means by which they would
9 achieve compliance with the Court's injunction prohibiting future RICO violations depends, in
10 part, upon the extent to which the Defendants would divert resources and funds to make the
11 proposed unconditional payments.

12 C. DR. GRUBER: AN ASSESSMENT FOR EACH YOUTH SMOKER IN
13 EXCESS OF A TARGET INCONSISTENTLY AFFECTS DEFENDANTS
14 ECONOMIC INCENTIVES TO COMMIT FUTURE RICO VIOLATIONS,
15 DEPENDING UPON THE CIRCUMSTANCES, AND IS NOT TARGETED
16 TO FUTURE RICO VIOLATIONS.

17 Q. Let's move on to your analysis of the remedy proposed by Dr. Gruber. How does
18 Dr. Gruber's proposal differ from the unconditional payments proposed by Drs. Fiore and
19 Healton?

20 A. The most important difference is the conditional nature of the proposed remedy.

21 As I have already discussed, the remedies suggested by Drs. Fiore and Healton are
22 unconditional. They consequently have no direct effect on Defendants' future conduct.

23 In contrast, Dr. Gruber's proposed assessment is conditional. The Defendants will pay
24 the assessment only if, starting in 2007, a Defendant cigarette manufacturer fails to achieve the
25 targeted reduction in youth smokers of its brands. Dr. Gruber's proposed remedy accordingly

1 affects directly the Defendant cigarette manufacturers' economic incentives to achieve the
2 targeted reductions in youth smokers of their cigarette brands.

3 Q. Is that the same thing as giving Defendants an economic incentive not to commit
4 RICO violations?

5 A. No.

6 Initially, Dr. Gruber's proposed remedy applies only to the Defendant cigarette
7 manufacturers. It would have no direct effect on the economic incentives of other Defendants to
8 engage in future RICO violations.

9 As to the Defendant cigarette manufacturers, Dr. Gruber's proposal does not directly
10 relate to the future commission of RICO violations by those Defendants. Rather, it relates to
11 whether youth smoking levels reach targeted reduction goals. The payments do not depend on
12 why a given manufacturer fails to meet the targeted reduction level.

13 Accordingly, a Defendant cigarette manufacturer may pay an assessment even though it
14 commits no RICO violations whatsoever in the future. Or, a Defendant may avoid paying an
15 assessment even though it commits RICO violations in the future.

16 Q. Professor Weil, did you help prepare a demonstrative exhibit to help you explain
17 your analysis?

18 A. Yes.

19 Q. Let me show you JDEM-060673. Is this the demonstrative that you helped prepare?

20 A. Yes.

Payments Under Dr. Gruber's Proposed Remedy Are Not Directly Linked to Future RICO Violations

	Future RICO Violations	Youth Smoking Target Level	Payments Assessed
If Directly Linked	YES	Above	YES
		Below	YES
Gruber Remedy	NO	Above	NO
		Below	NO
Gruber Remedy	YES	Above	YES
		Below	NO
	NO	Above	YES
		Below	NO

1 _____ JCPM 080818

2 Q. Please explain this demonstrative.

3 A. This illustrates that Dr. Gruber's proposed remedy is not effective. Its effects are like a
4 shotgun, not a targeted rifle. Dr. Gruber's proposed remedy directly relates to achieving youth
5 smoking target levels, not the Defendant cigarette manufacturers' potential future RICO
6 violations. It neither targets future RICO violations nor effectively prevents them.

7 As you can see, if a Defendant cigarette manufacturer meets the target reduction level,
8 that Defendant would not make any payments under Dr. Gruber's proposal even if that
9 Defendant committed RICO violations. Similarly, if a Defendant cigarette manufacturer does
10 not meet the target reduction level, that Defendant must make payments even if it did not commit
11 any RICO violations.

1 Because Dr. Gruber's proposal focuses directly on the youth smoking targets and not on
2 Defendants' conduct specifically, it does not precisely prevent and restrain future RICO
3 violations. In that sense, it is ineffective.

4 Q. Does Dr. Gruber's proposed remedy directly affect Defendants' economic incentives
5 to engage in future RICO violations?

6 A. Again, it has no direct effect on the economic incentives of the Defendants who are not
7 cigarette manufacturers.

8 As to the Defendant cigarette manufacturers, Dr. Gruber's proposed remedy directly
9 affects their economic incentives to engage in future RICO violations only inconsistently,
10 depending in part upon the circumstances. That is, depending upon the circumstances, Dr.
11 Gruber's proposed remedy could discourage a Defendant from committing a future RICO
12 violation, or could have no effect directly on a Defendant's economic incentives to commit
13 future RICO violations, or could encourage a Defendant to commit a future RICO violation.

14 Q. How does the effect of Dr. Gruber's proposed remedy on the Defendant cigarette
15 manufacturers' economic incentives to commit future RICO violations depend upon the
16 circumstances?

17 A. The effect of Dr. Gruber's proposed remedy on a Defendant cigarette manufacturer's
18 economic incentives to commit a particular RICO violation in the future depends on the interplay
19 of two different circumstances: (a) whether a particular Defendant cigarette manufacturer is
20 above or below Gruber's target levels of youth smokers; and (b) the effect of a particular RICO
21 violation on the number of youth smokers of a Defendant's brands. I have attempted to
22 summarize this in JDEM-060674, below:

Effect of Gruber Proposal on Defendants' Economic Incentives to Avoid Future RICO Violations

Effect of RICO Violation on Number of Youth Smokers of a Defendant's Brands

	NONE	INCREASE	DECREASE
Defendant <u>ABOVE</u> Youth Smoker Target	NO EFFECT		
Defendant <u>BELLOW</u> Youth Smoker Target	NO EFFECT	NO EFFECT	NO EFFECT

1 _____ JDEM-060674

2 Q. Please explain JDEM-060674 to the Court.

3 A. From an economics and accounting perspective, a proposed remedy ideally would
4 increase Defendants' economic incentives to avoid future RICO violations in all circumstances.

5 Dr. Gruber's proposed remedy does not do that.

6 As you can see in the demonstrative, Dr. Gruber's proposed remedy increases
7 Defendants' economic incentives to avoid future RICO violations in only one of the six sets of
8 circumstances portrayed in JDEM-060674. It is the middle column in the first row of the
9 demonstrative with the green arrow pointing up. Namely, where a Defendant cigarette
10 manufacturer is above its youth smoker target and committing the future RICO violation would

1 likely increase the number of youth smokers of its brands, Dr. Gruber's proposed remedy
2 increases that Defendant's economic incentives to avoid future RICO violations.

3 In four out of the six circumstances portrayed in JDEM-060674, Dr. Gruber's proposed
4 remedy has no incremental effect on Defendants' economic incentives to avoid future RICO
5 violations.

6 As seen in the second row of JDEM-060674, for instance, Dr. Gruber's proposed remedy
7 has no effect on Defendants' economic incentives to avoid future RICO violations as long as a
8 Defendant cigarette manufacturer is below its youth smoker target because, in that circumstance,
9 there is no assessment even if a Defendant commits RICO violations.

10 As seen in the first column of JDEM-060674, Dr. Gruber's proposed remedy also has no
11 effect on Defendants' economic incentives to commit future RICO violations whenever the
12 future RICO violation would have no effect on the number of youth smokers of a particular
13 Defendant's brands. For example, although I am not an expert in this area, one could imagine
14 that denials that environmental tobacco smoke causes lung cancer in otherwise healthy adult
15 never smokers, which counsel advised me is one of the alleged RICO violations, might not
16 importantly affect the number of youth smokers of a particular Defendant cigarette
17 manufacturer's brands. In that event, again, Dr. Gruber's "outcome-based" remedy would have
18 no effect on a Defendant cigarette manufacturer's incremental or marginal economic incentives
19 to avoid that alleged RICO violation in the future.

20 Finally, as seen in the upper right hand corner of JDEM-060674, with the red arrow
21 pointing down, when a Defendant cigarette manufacturer is above its youth smoker target, Dr.
22 Gruber's proposed remedy would reduce Defendants' economic incentives to avoid those future
23 RICO violations that would tend to decrease the number of youth smokers. Again, one could

1 imagine that suppressing explicit health claims for a truly safer cigarette, which counsel advised
2 me is one of the alleged RICO violations, might tend to prevent increases in the number of youth
3 smokers by keeping youth's perceptions of the health risks of smoking high.

4 Q. Is there any practical way to ensure that Dr. Gruber's "outcome-based" remedy
5 consistently provides every Defendant cigarette manufacturer with economic incentives to
6 avoid future RICO violations?

7 A. None that I can imagine.

8 The inconsistencies arise because (1) Gruber's "outcome" is not the commission of a
9 future RICO violation, (2) his "outcome" is likely affected by factors outside of the Defendant
10 cigarette manufacturer's exclusive control and certainly isn't solely a by-product of the decision
11 to commit future RICO violations; and (3) the RICO violations themselves do not necessarily all
12 affect the "outcome" or affect it in the same way.

13 Q. Is Dr. Gruber's proposed remedy targeted in the sense that it does not affect
14 Defendants' economic incentives to engage in future lawful conduct?

15 A. No. Gruber's proposed remedy would affect Defendants' future economic incentives to
16 engage in even perfectly lawful conduct that the manufacturer believes may affect the number of
17 youth smokers of the manufacturer's brands and its assessment.

18 For example, counsel advises that the Government nowhere contends that truthful
19 cigarette advertising targeted to individuals aged 21-25 or competition on the basis of price
20 constitute RICO violations. To the extent that such lawful advertising or price competition has
21 "spillover" effects on the number of youth smokers of a Defendant cigarette manufacturer's
22 brands and a particular manufacturer is over its target, Dr. Gruber's remedy could chill

1 Defendant's perfectly lawful advertising and diminish competition among Defendants in the
2 market for adult smokers.

3 Likewise, to the extent that youth anti-smoking campaigns affect the overall number of
4 youth smokers and a particular manufacturer is over its target, Dr. Gruber's proposed remedy
5 gives that Defendant an added economic incentive to run such an anti-smoking campaign, which
6 may be socially desirable, but counsel advises that a failure on the part of a Defendant cigarette
7 manufacturer to do everything within its power to reduce youth smoking of its brands is not a
8 RICO violation.

9 **III. WHAT IS THE LIKELY EFFECT OF THE PROPOSED REMEDIES ON**
10 **DEFENDANTS AND INNOCENT THIRD PARTIES?**

11 **A. INJUNCTIVE RELIEF IMPOSES NO HARM ON INNOCENT THIRD**
12 **PARTIES UNRELATED TO THE COMMISSION OF A FUTURE RICO**
13 **VIOLATION.**

14 **Q.** Professor Weil, I want to turn now to the second principal question that you
15 considered. Let's start with injunctive relief.

16 Would injunctive relief have adverse consequences on innocent third parties that
17 are unrelated to the commission of any future RICO violations by Defendants?

18 **A.** No. Any adverse consequences to innocent third parties in the future would be related to
19 the commission of a future RICO violation because injunctive relief targets future RICO
20 violations.

21 That is, if Defendants incur contempt penalties because they violate the injunction and
22 commit prohibited future RICO violations, there may well be harm to innocent third parties, but
23 it would be a consequence of the commission of a future RICO violation by Defendants.

24 If Defendants obey an injunction prohibiting future RICO violations, however, there will
25 be no contempt penalty and therefore no consequent harm to innocent third parties.

1 B. REQUIRING DEFENDANTS UNCONDITIONALLY TO PAY
2 APPROXIMATELY \$5.5 BILLION ANNUALLY FOR ABOUT 25 YEARS
3 LIKELY WOULD HAVE ADVERSE CONSEQUENCES ON INNOCENT
4 THIRD PARTIES UNRELATED TO THE COMMISSION OF A FUTURE
5 RICO VIOLATION.

6 Q. Let's turn now to the relief proposed by Drs. Fiore and Healton. Would any harm
7 to innocent third parties from requiring Defendants to pay approximately \$5.5 billion
8 annually be unrelated to commission of any future RICO violation by Defendants?

9 A. Yes.

10 As we have discussed, the proposed payments are unconditional. They do not relate to
11 whether Defendants commit RICO violations in the future. Any harm to innocent third parties as
12 a result of these payments would, therefore, likewise not relate to whether Defendants commit
13 RICO violations in the future.

14 Q. Would requiring Defendants to pay approximately \$5.5 billion annually likely have
15 adverse consequences on innocent third parties?

16 A. Yes.

17 Paying \$5.5 billion annually poses a significant risk of economic hardship, conceivably
18 including potential bankruptcy, to these Defendants. Even if Defendants could survive the
19 imposition of the proposed annual payments, the payments would impair Defendants' ability to
20 compete meaningfully in the U.S. cigarette market. Either event -- bankrupting Defendants or
21 impairing their ability to compete meaningfully -- would have adverse consequences on innocent
22 third parties.

23 Q. Let's take this in steps. First, in his testimony, Dr. Gruber suggested that
24 Defendants could pay the proposed unconditional annual payments by passing the costs
25 through to consumers in the form of higher prices (Gruber, 5/10/05, U.S. Trial Tr. at
26 20596:18-20597:4; 20668:21-25; and 20707:1-20).

1 Do you disagree with that suggestion?

2 A. I disagree. Textbook economics teaches that Defendants cannot simply pass the costs of
3 these payments through to consumers.

4 Specifically, the proposed remedy would impose unconditional payments only on these
5 Defendants. Other cigarette manufacturers need not pay. When some, but not all, competitors
6 face increased costs, the competitors with higher costs cannot pass them all through to
7 consumers in the form of higher prices. Should these Defendants increase their prices to attempt
8 to cover the costs of the proposed \$5.5 billion annual payments, they will lose market share to
9 their competitors who do not have to make these payments.

10 Indeed, if Defendants could simply increase their cash flows -- whether to boost profits or
11 to pay the proposed \$5.5 billion annual payments -- then, assuming they are rational profit
12 maximizers, they would do so now, independently of whether the Court adopts the proposed
13 unconditional payments. Dr. Gruber (U.S. Dep., 4/21/05 at 854:5-10) has no answer to this
14 point:

15 Q: All right. Well, if these defendants could experience real
16 growth in their proceeds by raising prices, why wouldn't they do it
17 now?

18 A: That's a good question. I mean, it's a question that's been
19 asked about the tobacco industry before, and I don't know the
20 answer.

21 Defendants have not, of course, done that, suggesting that raising prices by an amount
22 equal to the per-pack cost of the proposed unconditional payments is not profit enhancing and
23 that Defendants likely could not sustain an attempt to raise prices.

24 Q. Apart from economic theory, is there real world experience that supports the
25 teachings of textbook economics?

1 A. Yes. The experience comes from what happened in the wake of the Master Settlement
2 Agreement (MSA).

3 Although payments under the MSA are higher than \$5.5 billion annually, the MSA
4 attempted to create a level playing field, imposing roughly equivalent per pack costs on all
5 cigarette manufacturers (Gruber, 4/21/05, U.S. Dep. at 850:10-17). Dr. Gruber advised that, as a
6 result of the MSA, the Original Participating Manufacturers (OPMs) -- Philip Morris, Reynolds,
7 Lorillard, and Brown & Williamson -- have a current cost disadvantage compared to their
8 competitors. The cost advantage of the Subsequent Participating Manufacturers (SPMs) under
9 the MSA is only \$0.20 per carton, according to Dr. Gruber. The cost advantage of cigarette
10 manufacturers who are not a party to the MSA, the Non-Participating Manufacturers (NPMs) is
11 currently only \$0.25 per carton compared to OPMs. However, earlier, before a loophole was
12 closed, the NPMs enjoyed a greater cost advantage that varied depending upon the degree of
13 geographical dispersion of each NPM's market (Gruber, 4/21/05, U.S. Dep. at 872:6-873:12).

14 Q. What happened to the OPMs' market share since the adoption of the MSA?

15 A. Dr. Gruber further noted that the combined market share of the OPMs declined from
16 roughly 97 percent in the years before the MSA to about 85-84 percent afterwards (Gruber,
17 5/10/05, U.S. Trial Tr. at 20677:10-14). Dr. Gruber's analysis suggested that the OPMs' loss of
18 market share resulted from the cost disadvantage faced by the OPMs:

19 Contrary to the arguments of the plaintiffs, the MSA provides an
20 enormous competitive *advantage* to the NPMs. This is patently
21 true from a careful reading of the MSA, as described above. And
22 it is evidenced by the rapid rise in NPM market shares.

23 Gruber Declaration, Freedom Holdings, Inc. v. Spitzer (May 14, 2004) (JD-068097) at 17, ¶ 42
24 (emphasis in original).

1 However, since the cost advantage of the NPMs over the entire period since 1998 when
2 the MSA was first adopted is difficult to quantify, I reviewed the increase in market share
3 obtained by the SPMs who enjoyed a cost advantage of only \$0.20 per carton compared to
4 OPMs. The March 30, 2005, Report of the MSA's Independent Auditor,
5 PricewaterhouseCoopers (JD-068071 at Attachment 4a), shows that the market share of the
6 SPMs increased from about 2.7 percent of the market in 1997, before adoption of the MSA, to
7 over 7.5 percent in 2004, a gain of 4.8 market share points. JDEM-060676, below, shows this.

**SPMs Market Share Gains Associated with
\$0.20 per Carton Cost Advantage**
1997-2004

Market Share of All Participating Manufacturers, OPMs and SPMs				
	2004	Minus	1997	= Gain
(1) OPMs and SPMs	91.401%		99.584%	
OPMs Only:				
Lorillard	8.678%		8.621%	
Philip Morris	40.614%		46.216%	
R.J.R.	39.697%		39.933%	
(2) Total OPMs	83.989%		96.379%	
(3) SPMs share = (1) - (2)	7.842%	-	2.705%	= 4.837%

Market Share Gain by SPMs and Loss by OPMs = 4.837%

8 In short, the experience after the MSA is entirely consistent with economic theory. Small
9 cost disadvantages importantly affect market share.
10

1 Q. How does the MSA-induced \$0.20 per carton cost advantage enjoyed by the SPMs
2 relative to the OPMs compare to the cost advantage that Defendants' competitors would
3 enjoy if the Court were to require Defendants to pay \$5.5 billion annually?

4 A. The cost disadvantage that the Defendants would face as the result of the Government's
5 proposed unconditional payments of \$5.5 billion annually would dwarf the cost disadvantage
6 currently imposed by the MSA. Even assuming no loss of market share, the \$5.5 billion annual
7 payments represent a cost disadvantage to Defendants in excess of \$3.00 per carton, more than
8 15 times the cost disadvantage that the MSA imposed on the OPMs compared to the SPMs.
9 And, it is more than 12 times the cost disadvantage Dr. Gruber believes that the MSA currently
10 imposes on the OPMs compared to NPMs. If the cost-disadvantaged Defendants lose market
11 share through attempts to raise prices to cover increased costs, their cost disadvantage per carton
12 will increase even further.

13 If Defendants alone raised their prices by \$3.00 or more per carton, they would likely
14 suffer a devastating loss of market share and could not sustain the price increase.

15 Q. Dr. Gruber also testified that Defendants might be able to pay \$5.5 billion annually
16 by reducing costs (Gruber, 5/10/05, U.S. Trial Tr. at 20760:15-21).

17 Do you disagree?

18 A. Yes, I disagree. Again, textbook economics teaches that Defendants already have every
19 economic incentive to reduce their costs. If \$5.5 billion in annual cost savings were possible,
20 without incurring offsetting, greater costs in the future, textbook economics says that the
21 Defendants would have already made those cost cuts.

22 Although it is true that, in practice, companies in financial distress sometimes find ways
23 to reduce their costs, such as by deferring maintenance or squeezing employees, those are not

1 long-term solutions. Eventually, these short-term fixes give rise to long-term problems, such as
2 costly breakdowns in equipment, the need to replace equipment sooner, or the loss of valued
3 employees and an inability to fill vacancies.

4 Q. Finally, Dr. Gruber testified that Defendants might be able to pay \$5.5 billion
5 annually by reducing profits (Gruber, 5/10/05, U.S. Trial Tr. at 20747:20 -20748:4 and
6 20773:19-20774:2).

7 Do you disagree?

8 A. Economic and accounting theory teaches that the costs of the proposed \$5.5 billion
9 annual payments would have to come out of profits. The question then becomes whether
10 Defendants' profits are large enough to meet the proposed payments without jeopardizing
11 Defendants' credit ratings and ability to raise capital which would further increase their costs.

12 There is a significant question whether they are that large. Even before the MSA, Dr.
13 Gruber estimated that industry profits, not just for these Defendants, were on the order of \$4.6
14 billion a year (Gruber, 5/10/05, U.S. Trial Tr. at 20748:19-23), which suggests that they might
15 not be able to pay.

16 Q. You testified that in either event -- whether Defendants survive or whether they are
17 impaired competitively -- there would be adverse consequences to innocent third parties.
18 What are those likely consequences?

19 A. Whether the Defendants survive at a reduced level or whether the remedies bankrupt
20 them, the shareholders, creditors, employees, and retirees (to the extent that the pension funds are
21 underfunded) of the Defendants will suffer.

22 Also, to the extent that NPMs, cigarette manufacturers that are not signatory to the MSA,
23 meet the continuing demand for cigarettes, the MSA payments to the States likely would go

1 down significantly because the NPMs make their roughly equivalent payments into an escrow
2 account which reverts to the NPMs after 25 years, provided that the States do not sue the NPMs
3 successfully for damages (Gruber Declaration, Freedom Holdings, Inc. v. Spitzer (May 14, 2004)
4 (JD-068097) at 12, ¶ 28 and 14, ¶ 32).

5 Moreover, to the extent that the MSA's prohibitions and restrictions -- *e.g.*, the
6 prohibition on billboards, cartoon characters in advertising, and on directly or indirectly targeting
7 youth -- have public health value, then an increasing proportion of industry sales likely would be
8 met by NPMs that are unconstrained by those provisions.

9 C. DR. GRUBER'S PROPOSED ASSESSMENT FOR EXCESS YOUTH
10 SMOKERS LIKELY WOULD HARM INNOCENT THIRD PARTIES
11 UNRELATED TO THE COMMISSION OF FUTURE RICO VIOLATIONS
12 BY DEFENDANTS.

13 Q. Let's now turn to Dr. Gruber's proposed, company-specific assessment of \$3,000
14 per excess youth smoker above his targets. Could any assessment for excess smokers be
15 unrelated to the commission of future RICO violations by Defendants?

16 A. Yes. As I have already discussed, Dr. Gruber's proposed remedy targets youth smoking,
17 not RICO violations. Accordingly, any assessment need not be related to any commission of
18 future RICO violations by a Defendant cigarette manufacturer.

19 Q. Dr. Gruber testified that, assuming there were no further reductions in youth
20 smoking of the Defendant cigarette manufacturers' brands, his company-specific
21 assessments could total as much as approximately \$2 billion a year (Gruber, 5/10/05, U.S.
22 Trial Tr. at 20773:6-18).

23 Would company-specific assessments totaling as much as \$2 billion a year likely
24 harm innocent third parties and, if so, whom?

1 A. Yes, for the same reasons that the \$5.5 billion in unconditional annual payments would
2 likely harm innocent third parties, so, too, would Dr. Gruber's proposed remedy. The innocent
3 persons who would likely be harmed are also the same.

4 IV. ERRORS IN THE GRUBER \$3,000 PER YOUTH SMOKER ASSESSMENT.

5 Q. Professor Weil, I want to turn to the \$3,000 per youth smoker assessment that has
6 been proposed by Dr. Gruber. Have you analyzed that figure to determine if Dr. Gruber
7 made any errors in calculating that amount?

8 A. Yes.

9 Q. What did you determine?

10 A. Dr. Gruber has made two fundamental mistakes in providing a \$3,000 ceiling for the
11 present value of future gains earned per youth smoker.

12 First, he focuses on so-called proceeds from the sale of cigarettes, not on margins or
13 profits, which subtract some measure of variable costs from raw proceeds.

14 Second, he uses a real price increase of 42 percent over a 7-year period.

15 Q. Let's take them one at a time. What is the difference between proceeds and profits?

16 A. Profits equal revenues minus costs. Dr. Gruber's proceeds are revenues, with
17 subtractions only for some direct costs and for income taxes.

18 Q. Is there an example that you can provide the Court using my client, R.J. Reynolds
19 Tobacco Company, as an example?

20 A. Yes.

21 In connection with my earlier work in this case, I considered, for Reynolds' domestic
22 tobacco business, Dr. Fisher's estimates of Reynolds' proceeds, and I estimated Reynolds' actual
23 profits. I compare below those estimates for the period prior to the MSA, 1993-1998, in

1 JDEM-060675. As JDEM-060675 shows, Dr. Fisher's estimates of Reynolds' proceeds per
 2 cigarette from 1993 to 1998 were about eight times greater than Reynolds' actual profits.

**Computation of Ratio of Fisher Proceeds [Adjusted by
 Gruber for After-tax Amount] to RJR Net Income**

1993-1998

(\$ Millions)	Fisher Proceeds for RJR ¹	RJR Net Income ²	RJR Estimated % of Domestic Tobacco OCC Based ³	Estimated Domestic Tobacco Net Income ⁴
1993	1,114	(139)	42.5%	(85.7)
1994	1,652	617	46.6%	2,358
1995	1,486	622	47.7%	2,733
1996	1,527	689	42.6%	2,823
1997	1,400	403	44.2%	1,913
1998	1,942	(616)	52.3%	(370.0)
Total	9,091			658.4
Gruber Taxes at 40%	- 3,636			
Cumulative Gruber After-tax Proceeds	\$ 5,455		Cumulative RJR Domestic Tobacco Net Income	\$ 658.4

Ratio of Total Fisher/Gruber Proceeds to RJR Net Income for Period 1993-1998 = \$3.3 times

3 JDEM-060675

4 Q. Why is Dr. Gruber's use of proceeds an error?

5 A. A fundamental notion of both economics and accounting is the "cost object," the
 6 incremental economic activity for which one wishes to measure costs. I explain this concept in
 7 one of my textbooks, Maher, M.W., Stickney, C.P., and Weil, R.L., Managerial Accounting: An
 8 Introduction To Concepts, Methods, and Uses, (7th ed., The Dryden Press, 2001) (JD-068094)
 9 at 13.

10 Q. What is Dr. Gruber's cost object?

1 A. Dr. Gruber testified that he is attempting to estimate the upper limit of the benefit to the
2 Defendant cigarette manufacturers from selling cigarettes to excess youth smokers over the
3 course of their lifetime (Gruber, 5/10/05, U.S. Trial Tr. at 20745:8-16). Thus, his cost object --
4 the incremental economic activity whose cost he proposes to measure -- is the production and
5 sale of cigarettes purchased by excess youth smokers over the course of their lifetime.

6 Q. Given that Dr. Gruber's cost object is the Defendant cigarette manufacturers' sales
7 to excess youth smokers over the course of their lifetime, what is the appropriate measure
8 of the Defendant cigarette manufacturers' expected gains?

9 A. Profits.

10 Q. Why profits instead of proceeds?

11 A. To justify using proceeds unreduced by other incremental costs, Dr. Gruber adduces the
12 fact that the marginal costs of producing a marginal cigarette are near zero so the analysis can
13 ignore those costs without committing an error. While one might concede that if the Defendant
14 cigarette manufacturers were to produce one more marginal cigarette than they do now, the
15 variable costs other than direct labor, direct materials, and income taxes would be small. But Dr.
16 Gruber's cost object is not the sale of a single marginal cigarette.

17 Dr. Gruber confuses marginal costs with the incremental costs of the sales to all excess
18 youth smokers over their entire lifetime. At issue here are the incremental costs of producing
19 enough cigarettes to supply all youth smokers over the target all the cigarettes they will smoke
20 for the rest of their lives. No economist will think that the incremental costs of producing those
21 cigarettes are merely direct labor, direct materials, and income taxes.

22 Indeed, Dr. Gruber's own work provides an auxiliary estimate that each excess youth
23 smoker will smoke about 167,000 cigarettes in his or her lifetime and that the number of excess

1 youth smokers from 2007 to 2017 alone would be 5.04 million smokers, if youth smoking
2 remains at its current levels. (See Gruber April 2005 Corrected Expert Report, A - Gruber
3 corrected report tables.pdf, Table 2 (summing row five, "new misses," yields 5,040,000 excess
4 youth smokers from 2007-2017, assuming no change in youth smoking) (JD-068095) and C -
5 Backup Files/ipy/compile_ipy.do (166,948 cigarettes per excess smoker is estimated by Dr.
6 Gruber as step two of the five steps necessary to derive his \$3,000 assessment (U.S. Exhibit
7 18,257); this is the result -- 166,948 cigarettes per excess smoker, when Dr. Gruber's computer
8 program is stopped at step two. See JD-068096.)

9 Thus, Dr. Gruber's cost object, adopting his assumption that there is no reduction in
10 youth smoking from current levels, is the production and sale of 841 billion cigarettes over
11 decades. Over 80 years, that is more than 10 billion cigarettes each year, a number on the order
12 of 3 percent of current annual cigarette production for domestic consumption, not a single
13 cigarette.

14 Q. How, in your opinion, should incremental profits that Defendants will earn from
15 sales to youth smokers be calculated?

16 A. To measure the incremental profits the Defendants will earn from sales to youth smokers
17 exceeding the target over many decades, one must subtract long-run variable costs, or direct
18 costs properly defined, of producing the items sold to them.

19 The direct costs of all sales made to excess youth smokers include more than just the
20 costs of labor and material and taxes. Without those excess youth smoker sales, the Defendants
21 would have avoided all of the variable costs associated with those sales, including the costs of
22 the additional manufacturing capacity, managers, and advertising that supported those sales.

1 Q. Let's turn to Dr. Gruber's second error -- the 42 percent price increase. Why is that
2 an error?

3 A. Dr. Gruber bases that 42 percent increase on several implicit assumptions. First, he
4 assumes that because the Defendants raised their real prices approximately 46 percent between
5 1993 and 2000, in part because of the Master Settlement Agreement, that they can raise their real
6 prices another 42 percent while paying the proposed remedies. Second, he notes that if
7 Defendants raise real prices by 42 percent and the price elasticity of demand by youth smokers is
8 minus one, then Defendants could raise their real prices by 42 percent in order to reduce youth
9 smoking by 42 percent.

10 First, as I discussed, the price increase in the period from 1993 to 2000 is not analogous.
11 Dr. Gruber ignores that between 1993 and 2000 all sellers of cigarettes, Defendants and non-
12 Defendants, faced increased excise taxes and other costs related to the MSA. Under Dr.
13 Gruber's proposed remedy, only the Defendants will suffer cost increases.

14 Moreover, as we also discussed, if some group of the Defendant cigarette manufacturers
15 were to increase their prices by 42 percent, their competitors can keep their prices at current
16 levels and take market share from Defendants. The Defendants cannot force their competitors to
17 match the price increases. It strains the imagination that the Defendants would raise their prices
18 by such an amount when the evidence shows that consumers will switch to competitors who can
19 charge lower prices, while remaining profitable.

20 Second, even assuming that Dr. Gruber is right to treat demand elasticity of excess youth
21 smokers as minus one, no optimizing Defendant cigarette manufacturer would raise prices
22 enough to reduce excess youth smokers to zero. Every Defendant cigarette manufacturer knows
23 that as it raises prices for youth smokers, it must simultaneously raise prices for all smokers.

1 Each Defendant knows that many smokers' demand curves have elasticity different from zero.
2 As a Defendant raises prices, its customers will substitute cigarettes sold at lower prices by
3 competitors. So each unit of price would, by hypothesis, decrease the fines for excess youth
4 smokers, decreasing costs, but would simultaneously decrease revenues from all other smokers.

5 Even if all of Dr. Gruber's assumptions about price elasticity of excess youth smokers
6 and the ability of the Defendant cigarette manufacturers to sustain unilateral price increases are
7 correct, optimal behavior by those Defendants will see price increases less than the amount
8 required to reduce excess youth smokers to zero.

9 Q. Thank you, Professor Weil.